

REMARKS

Applicant intends this response to be a complete response to the Examiner's 12 December 2007 Final Office Action. Applicant has labeled the paragraphs in his response to correspond to the paragraph labeling in the Office Action for the convenience of the Examiner.

DETAILED ACTION

Claim Objections

2. **Claims 45, 53, 64, 65, and 70 - 81** stand objected to because of the following informalities:

The Examiner states as follows:

The status identifier of claim 45 indicates that the claim was amended, but no amendments are shown in the text of the claim. As such, the claim has been treated as "previously presented" status for purposes of examination. It appears that claim 53 should depend from claim 52 to provide proper antecedent basis for the claim language. With regard to claim 64, it appears that the phrase "substance is selected" (line 2) should read "substance selected" to be grammatically consistent with the phrase that precedes it. With regard to claim 65, it appears that it should depend from claim 64 to provide proper antecedent basis for the claim language. With regard to claim 70, it appears that it should depend from claim 69 to provide proper antecedent basis for the claim terms. With regard to claims 71 - 76, 80, and 81, it appears that the claims should depend from claim 69, based upon the renumbering of the claims. With regard to claim 77, it appears that the phrase "substance is selected" (line 2) should read "substance selected" to be grammatically consistent with the phrase that precedes it. With regard to claims 78 and 79, it appears that they should depend from claim 77 to provide proper antecedent basis for the claim terms. Appropriate correction is required.

Applicants thank the Examiner for these kind suggestions and for the diligent review of the claims. Applicants' attorney apologizes for not catching these obvious errors prior to submission. Applicants, therefore, request withdrawal of the objection.

Claim Rejections - 35 USC § 112

3. **Claims 49, 60, and 73** stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention is hereby maintained for the reasons of record.

The Examiner states as follows:

Although Applicant's remarks (page 10) indicate that amendments were made to overcome the rejections of these claims, no amendments were made to these claims and the remarks appear to be relevant to amended claims 50, 62, and 75 instead.

Applicants believe that claim 49 does further limit claim 45. Claim 45 recites "radiation having at least one frequency or wavelength", while claim 49 "radiation has comprises a single wavelength or frequency or a plurality of wavelengths or frequencies." This limits the at least one frequency limitation of claim 45. This is also true for claims 60 and 73.

Claim Rejections - 35 USC § 102

4. **Claims 45 - 67** stand rejected under 35 U.S.C. 102(b) as being anticipated by Hatschek is hereby maintained for the reasons of record.

The Examiner states as follows:

Hatschek teaches an optical measurement system (Figure 4; column 6 - 8) suitable for determination of oxygen saturation from the underside of a subject's tongue (column 11, lines 41 - 64). It is inherent that at least some of the measurement light would irradiate a big vein of the subject's tongue and that the detecting step would be performed in the presence of a static (earth's) magnetic field.

While Applicants still maintain the allowability of claims 45-68 over Hatschek, Applicants have decided to permit the allowable claims to issue with no further prosecution and are concurrently filing a continuation application directed to claims 45-68 to further their prosecution.

Therefore, Applicants have canceled claims 45-68 rendering this section 102(b) rejection moot.

Claim Rejections - 35 USC § 103

5. **The rejection of claim 68** under 35 U.S.C. 103(a) as being unpatentable over Hatschek as applied to claim 57 above, and further in view of Takeuchi et al. is hereby maintained for the reasons of record.

The Examiner states as follows:

Hatschek teaches all of the features of the claimed invention except for a device for generating a static magnetic field. Takeuchi et al. (Figure 1 and the description thereof) teach that a device for generating a static magnetic field is required to perform magnetic resonance measurements in coordination with optical measurements of a subject. It would have been obvious to one of ordinary skill in the art at the time of the invention to implement Hatschek with a device for generating a static magnetic field, as taught by Takeuchi et al., since this allows magnetic resonance measurements to be performed in addition to the optical measurements.

While Applicants still maintain the allowability of claims 45-68 over Hatschek, Applicants have decided to permit the allowable claims to issue with no further prosecution and are concurrently filing a continuation application directed to claims 45-68 to further their prosecution.

Therefore, Applicants have canceled claims 45-68 rendering this 103(a) rejection moot.

Response to Arguments

6. Applicant's arguments filed 27 September 2007 have been fully considered but they are not persuasive. Applicant contends that the claims define over Hatschek since Hatschek is concerned with measurements in capillaries in the dermis and utilizes heating while the invention of the instant

application measures directly from a large vessel on the underside of the tongue and does not need heating. With regard to Applicant's contention regarding the disclosure of heating elements in Hatschek, it is noted that Applicant's claims include the open-ended transition phrase "comprising". As such, even if Hatschek includes additional elements, such as the heating elements, that are not set forth in applicant's claims, so long as Hatschek discloses each of the claimed elements or steps (Applicant is referred to the prior Office action for these details), the claim does not define over Hatschek. Applicant further contends that Hatschek does not teach measurements from or a probe sized for obtaining measurements from a big vein associated with an underside of a patient's tongue. However, Applicant's attention is drawn to Figures 6 - 8, and the description of column 11, lines 41 - 64. It is noted that the size of the probes in on the order of dimensions of a finger. An object of the size and arrangement disclosed in Figure 8 can easily be inserted into a subject's mouth beneath the tongue, and indeed is designed for such placement, as suggested by Hatschek (column 11, lines 41 - 64). Further, as described in the referenced passage, the emitter and detector arrangements (23) are on the tip of the probe. It is noted that with regard to the rejection of claim 68, Applicant provides no further arguments than those addressed above. Thus, contrary to Applicant's assertions, Hatschek or Hatschek and Takeuchi et al. teach each of the claim limitations. As such, the rejections are proper and are hereby maintained.

Allowable Subject Matter

7. Claim 69 is allowed.
8. Claims 70 - 72 and 74 - 81 would be allowable if rewritten or amended to overcome the objections set forth in this Office action.
9. Claim 73 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

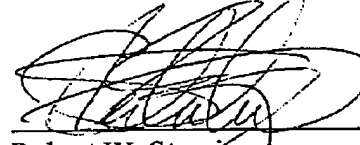
10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

If it would be of assistance in resolving any issues in this application, the Examiner is kindly invited to contact applicant's attorney Robert W. Strozier at 713.977.7000.

The Commissioner is authorized to credit or debit deposit account number 501518 if required for this response.

Respectfully submitted,

Date: April 11, 2008


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